

WHAT IS CLAIMED IS:

1. A power control unit for controlling a power supply of a computer, which operates by obtaining a power supply from
5 a main power source during normal operation, in a vehicle including an unlocking detecting section for detecting whether or not a door of the vehicle is unlocked, an ignition key detecting section for detecting whether or not an ignition key is switched from ON to OFF, and an auxiliary battery, comprising:

10 an auxiliary battery control section for booting up the computer by starting a power supply from the auxiliary battery to the computer when the unlocking detecting section detects that the door is unlocked; and

a power source switching section for stopping a power
15 supply from the auxiliary battery and starting a power supply from the main power source when the ignition key detecting section detects that the ignition key is switched from OFF to ON during the power supply from the auxiliary battery.

20 2. The power control unit according to claim 1, wherein the auxiliary battery control section monitors an amount of power remaining in the auxiliary battery, and boots up the computer by starting a power supply from the auxiliary battery to the computer only when the unlocking detecting section detects that the door
25 is unlocked and the amount of power remaining in the auxiliary

battery is equal to or greater than a predetermined value.

3. The power control unit according to claim 1, further comprising a state determining section for determining a start
5 and end state of the computer, wherein

the auxiliary battery control section boots up the computer by starting a power supply from the auxiliary battery to the computer only when the unlocking detecting section detects that the door is unlocked and the state determining section
10 determines that the computer is in a state in which it is not capable to be booted up unless an initial boot-up is completed.

4. The power control unit according to claim 1, wherein the ignition key of the vehicle and the auxiliary battery
15 control section include authentication information for identifying a user of the vehicle,

the vehicle obtains the authentication information from the ignition key when it is detected that the door is unlocked, and

20 only when the unlocking detecting section detects that the door is unlocked and the authentication information included in the auxiliary battery control section coincides with the authentication information obtained by the vehicle, the auxiliary battery control section boots up the computer by starting a power
25 supply from the auxiliary battery to the computer.

5. A power control unit for controlling a power supply of a computer, which operates by obtaining a power supply from a main power source during normal operation, in a vehicle including
5 an unlocking/locking detecting section for detecting whether or not a door of a vehicle is unlocked/locked, an ignition key detecting section for detecting whether or not an ignition key is switched from ON to OFF, and an auxiliary battery, comprising:

a time measuring section for measuring a predetermined
10 time from when the unlocking/locking detecting section detects that the door is unlocked;

an auxiliary battery control section for booting up the computer by starting a power supply from the auxiliary battery to the computer if the unlocking/locking detecting section does
15 not detect that the door of the vehicle is locked while the time measuring section measures the predetermined time; and

a power source switching section for stopping a power supply from the auxiliary battery and starting a power supply from the main power source when the ignition key detecting section
20 detects that the ignition key is switched from OFF to ON during the power supply from the auxiliary battery.

6. A power control unit for controlling a power supply of a computer, which operates by obtaining a power supply from
25 a main power source during normal operation, in a vehicle including

an unlocking detecting section for detecting whether or not a door of the vehicle is unlocked, an ignition key detecting section for detecting whether or not an ignition key is switched from ON to OFF, an auxiliary battery, and a user detecting section for
5 detecting whether or not a user gets in the vehicle, comprising:

an auxiliary battery control section for booting up the computer by starting a power supply from the auxiliary battery installed in the vehicle to the computer when the user detecting section detects that the user gets in the vehicle after the unlocking
10 detecting section detects that the door is unlocked; and

a power source switching section for stopping a power supply from the auxiliary battery and starting a power supply from the main power source when the ignition key detecting section detects that the ignition key is switched from OFF to ON during
15 the power supply from the auxiliary battery.

7. A vehicle-installed apparatus for controlling a power supply of a computer, which operates by obtaining a power supply from a main power source during normal operation, in a vehicle
20 including an unlocking detecting section for detecting whether or not a door of the vehicle is unlocked and an ignition key detecting section for detecting whether or not an ignition key is switched from ON to OFF, comprising:

an auxiliary battery;
25 an auxiliary battery control section for booting up the

computer by starting a power supply from the auxiliary battery to the computer when the unlocking detecting section detects that the door is unlocked; and

5 a power source switching section for stopping a power supply from the auxiliary battery and starting a power supply from the main power source when the ignition key detecting section detects that the ignition key is switched from OFF to ON during the power supply from the auxiliary battery.

10 8. A vehicle-installed apparatus for controlling a power supply of a computer, which operates by obtaining a power supply from a main power source during normal operation, in a vehicle including an unlocking/locking detecting section for detecting whether or not a door of the vehicle is unlocked/locked and an
15 ignition key detecting section for detecting whether or not an ignition key is switched from ON to OFF, comprising:

an auxiliary battery;

a time measuring section for measuring a predetermined time from when the unlocking/locking detecting section detects
20 that the door is unlocked;

an auxiliary battery control section for booting up the computer by starting a power supply from the auxiliary battery to the computer if the unlocking/locking section does not detect that the door of the vehicle is locked while the time measuring
25 section measures the predetermined time; and

a power source switching section for stopping a power supply from the auxiliary battery and starting a power supply from the main power source when the ignition key detecting section detects that the ignition key is switched from OFF to ON during the power supply from the auxiliary battery.

9. A vehicle-installed apparatus for controlling a power supply of a computer, which operates by obtaining a power supply from a main power source during normal operation, in a vehicle including an unlocking detecting section for detecting whether or not a door of the vehicle is unlocked, an ignition key detecting section for detecting whether or not an ignition key is switched from ON to OFF, and a user detecting section for detecting whether or not a user gets in the vehicle, comprising:

an auxiliary battery;

an auxiliary battery control section for booting up the computer by starting a power supply from the auxiliary battery to the computer when the user detecting section detects that the user gets in the vehicle after the unlocking detecting section detects that the door is unlocked; and

a power source switching section for stopping a power supply from the auxiliary battery and starting a power supply from the main power source when the ignition key detecting section detects that the ignition key is switched from OFF to ON during the power supply from the auxiliary battery.